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Notice of Allowability	Application No.	Applicant(s)	
	10/031,582	GAEDKE ET AL.	
	Examiner	Art Unit	
	Jerry T Rahl	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application received 18 January 2002.
2. ☒ The allowed claim(s) is/are 1-5.
3. ☒ The drawings filed on 18 January 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

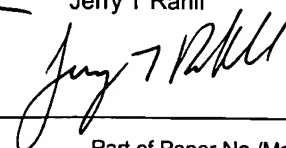
5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>01-2002</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


 AKM ENAYET ULLAH
 PRIMARY EXAMINER

Jerry T Rahl



Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings submitted on 18 January 2002 have been reviewed and determined to facilitate understanding of the invention. The drawings are accepted as submitted.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

4. The application has been amended as follows:

5. The abstract is amended to read: " An electrical insulation device for bidirectional connecting lines is proposed which operates reliably at high frequencies and can be integrated easily on a chip. For the purpose of electrical isolation, two separate optocouplers are provided per bidirectional connecting line. A control unit evaluates the control signals which are output by one of the two circuit units, and thereupon activates one of the two optocouplers while the other optocoupler is simultaneously deactivated, in order, in this way, to allow transmission of signals via the associated connecting line in one direction. Alternatively, only a single optocoupler is provided per bidirectional connecting line. The control unit is provided in this solution as well, except that in this case it changes over the effective direction of the optocoupler by means of corresponding circuit components, thereby once again achieving transmission of signals via

the associated connecting line in one direction.”

Examiner’s Statement of Reasons for Allowance

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

7. Claims 1-5 are allowed. Claims 1-5 describe an electrical insulation device for a bidirectional connecting line that connects two electronic circuits to one another having at least one optocoupler providing the electric insulation where either one bidirectional optocoupler or two separate unidirectional optocouplers are provided with a control unit generating switching signals which either change direction of the bidirectional optocoupler or activates one of the unidirectional optocouplers and deactivates the other unidirectional optocoupler.

8. U.S. Patent No. 5,661,583 to Nhu describes an electrical insulation device for a bidirectional connecting line that connects two electronic circuits to one another having at least one optocoupler providing the electric insulation. Nhu does not describe a control unit generating switching signals which either change direction of the bidirectional optocoupler or activates one unidirectional optocouplers and deactivates the other unidirectional optocoupler.

9. U.S. Patent No. 5,661,583 to Nhu remains the closest prior art of record in this application. For the reasons stated above, however, Claims 1-5 herein are deemed to patentably distinguish over Nhu and all other prior art of record.

Art Unit: 2874

Conclusion

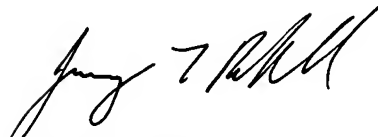
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 6,556,750 to Constantino et al. and 4,634,877 to Wills describe optocouplers providing electric insulation.

11. Prior art documents submitted by applicant in the Information Disclosure Statement filed on 18 January 2002 have all been considered and made of record (note the attached copy of form PTO-1449).

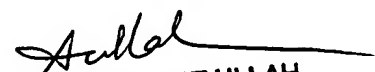
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-F (8:00-5:30), with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry T Rahll



AKM ENAYET ULLAH
PRIMARY EXAMINER